NECTAR 2.0

The Nectar token's purpose is to grow the world's largest community of decentralised exchange users.

This document outlines a redesigned set of utilities for Nectar and a new economic model to act as a base for the next stage of its evolution.

Contents

Introduction

The Nectar Token (NEC) was designed in 2017 and launched at the start of 2018 with the aim of incentivising liquidity on markets traded on the Ethfinex digital-asset exchange platform. Ethfinex's initial vision was to decentralise its platform along two streams in parallel: Technology and Governance.

The Nectar Token was the instrument for incentivising and enabling this transitional evolution. This document lays out the launch vision for Nectar 2.0, with a series of fundamental design improvements enabling Nectar to successfully deliver its goals.

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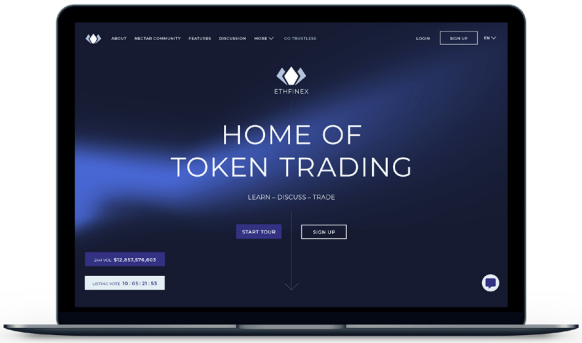
Technology

Advanced Centralised

January 2018

Ethfinex is born, laying the foundations to start our journey to decentralisation.



Governance

Voting Tools

May 2018

NEC holders directly impact the governance of Ethfinex, proposing ideas to the Nectar community and voting on its future direction. This extends to voting for which tokens will be next listed on the platform.

Nectar Token

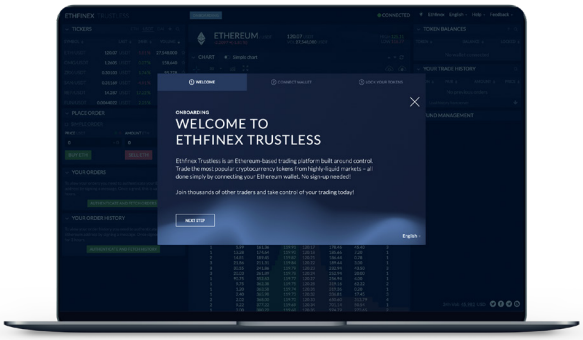
February 2018

The Nectar token is launched to distribute ownership of Ethfinex amongst our traders, providing those that contribute with a stake in the long-term success of the exchange.

Trustless

September 2018

We launch Trustless, the world's first trustless exchange interface using the Ethereum blockchain, which can connect directly into a centralised exchange. This allows Ethfinex users to choose between trustless on-chain settlement or high speed execution.



Decentralised

Coming Soon

Governance Experiments

October 2018

We host a governance summit featuring academics, projects and innovators from a wide array of disciplines to discuss the implications of distributed governance and how we can ethically lay the groundwork for the future.

The summit culminated in the first meeting for Nectar token holders, with future direction and actions established for Ethfinex's development.

Background

Under the original model, NEC was inflationary, with new tokens created in proportion to trading volume and distributed to market makers.

The Nectar (NEC) token was launched in February 2018 with the primary purpose of incentivising liquidity on the Ethfinex centralised exchange. Traders who provided liquidity to the order books were rewarded with NEC tokens when their limit orders were matched. Tokens were issued in proportion to each trader's share of total exchange maker volume. This was not only a novel concept at the time, paving the way for a host of copycat exchange tokens, but also acted as an effective mechanism to distribute the token to those who had the greatest involvement with the exchange.

Furthermore, 50% of Ethfinex exchange trading fees were pledged to NEC holders via a set of smart-contracts on the Ethereum blockchain to token holders. As of 20th September 2019, there are 17,807 ETH[1] (~4.0 million USD) pledged to holders.

The original NEC 1.0 model was inflationary, such that the amount of NEC issued per USD value of trading volume on the exchange decreased over time. Traders were incentivised to provide liquidity to the exchange sooner rather than later due to the declining issuance schedule.

The token was also used to make governance decisions via a community portal at Nectar. Community. For example, NEC holders were issued temporary voting tokens which they were then able to use to vote new tokens onto the exchange. There were 14 such voting rounds leading to over 40 new tokens being added to Ethfinex.[3]

[1] *https://etherscan.io/address/0xc6cde7c39eb2f0f0095f41570af89efc2c1ea828*

[2] *https://nectar.community*

[3] *https://nectar.community/token-pool*

Impetus for Change

Since the launch of the concept for the Nectar token and the Ethfinex hybrid self-custodial exchange in the first Ethfinex whitepaper, published on 2nd August 2017, our technology has continued to develop.

Since the launch of the concept for the Nectar token and the Ethfinex hybrid self-custodial exchange in the first Ethfinex whitepaper[4], published on 2nd August 2017, our technology has continued to advance and there have been significant developments in the fields of:

1. Token economics;

2. Decentralised exchanges and other scalable and/or privacy preserving blockchain-based applications; and

3. Decentralised (community) governance.

We believe Ethfinex has played a leading role in all three of these fields, contributing novel experimentation and many industry firsts, such as:

- Trade-mined token distribution to incentivise market makers;
- Single-use, tradable, voting rights, dissociated from the underlying tokens, allowing for complex voting mechanisms (Ethfinex Voting Tokens or EVT);
- The first exchange to make it possible to access order books and trade from a hardware wallet with a counterparty which is using a centralised exchange, thereby facilitating secure high-volume trading.

These advances have continued to be developed through other projects.

However, the original vision for Nectar included an acknowledgement that the token must evolve in-line with advancements in these fields, and the current implementation is now out-of-date.

The previous phase of Nectar's journey was largely built around the centralised Ethfinex exchange

[4] *https://www.bitfinex.com/ethfinex-whitepaper.pdf*

platform, with an inflating supply of tokens earned continuously by those who traded on the platform. This simulated a mechanism akin to mining in proof-of-work to facilitate the initial distribution of Nectar tokens to a large number of traders, rather than through a sale or other distribution mechanism, and was subsequently dubbed 'trade-mining' when later adopted by numerous other exchanges.

However, today, Ethfinex Trustless (now DeversiFi) has matured as a decentralised trading platform and has reached a point where its features and user experience can match those available on fully centralised platforms. This growth will be taken one step further with the imminent introduction of margin trading and several novel features. At the same time, tools for decentralised community governance have also significantly advanced. For instance, projects such as Aragon and DAOstack[5] are starting to be used to make and implement decisions for production systems. Nectar is therefore able to take the next step along its journey, moving away from the centralised Ethfinex platform and redefining itself around Ethfinex Trustless, with all future decision making being made by an open and decentralised community. Consequently, Ethfinex Trustless will rebrand and evolve to become DeversiFi.

External factors:

The centralised and decentralised exchange industry is changing fast, and there are now several competitive models for 'exchange tokens' which have survived the test of time. These exchange tokens have evolved to not only provide traders with real utility and valuable benefits, but also to provide a mechanism for traders to tie themselves to the long term future of an exchange that goes beyond simply making and taking liquidity.

The most popular exchange token business models center around trading fees as a percentage of trading volume. However, as competitive forces grow, exchanges are required to compete across new dimensions and make money from added value services, such as listings, initial public offerings and sale of market data. This is similar to the traditional exchange sector[6].

Nectar must react to remain competitive as part of this changing landscape.

[5] *https://www.bitfinex.com/ethfinex-whitepaper.pdf*

[6] *https://www.unpri.org/download?ac=5427*

Token Design Goals

There are many important considerations and modelling involved in token design. Nonetheless, the following two considerations were at the forefront when designing the mechanisms and benefits in the new Nectar 2.0 model.

1 Simplicity

The design of the token must be simple. A cryptocurrency token adds new economic incentives onto whichever systems it interacts with. Ensuring these new incentives are clear therefore improves the efficiency of the token at achieving its goal.

Holders of the token (predominantly traders in this case) must be able to understand the model and calculate its value independently. The token's design may still contain many facets and utilities but they should be complementary and standalone, rather than interacting in complex ways.

2 Incentive Alignment

The primary goal of Nectar is to amplify the network effects which exist around liquidity on exchanges by aligning the incentives of traders, (particularly those who contribute liquidity as market-makers) with the exchange.

Exchanges in the past were relationship businesses, with customers choosing to trade at the marketplace or venue where they had the best relationships and incentives. Blockchain enables these incentives and relationships to be codified, transparently and immutably. This results in benefits from loyal long-term relationships with a particular platform such as DeversiFi.

Nectar is the vehicle for representing this loyalty. Thus, it must incentivise behaviour which brings liquidity and trading volume to DeversiFi and must reward long term traders and Nectar token holders when the platform is successful.

NECTAR

Utilities & Benefits

EVOLUTION

1

Token Supply Reduction and the Switch from Inflation to Deflation

The original Ethfinex whitepaper proposed an innovative method for slowly distributing tokens every month to ensure that the distribution was aligned with the largest users of the exchange over time. This method was implemented in February 2018, with tokens being earned and distributed ever since.

As a result, over 2000[7] accounts are holding Nectar tokens, either on their centralised Ethfinex wallet or in their privately owned Ethereum wallets. As users must be trading to earn tokens, the token holders are familiar with the industry and are positioned to be able to guide the next steps for Nectar in a way which pure speculators would not be.

Challenges

Firslty, a high proportion of tokens are held in centralised on-exchange wallets. Therefore, the visibility of the token distribution and the token holders has been extremely low. This lack of visibility has inhibited Nectar's usefulness in the past for several of our governance experiments such as token listings.

Secondly, uncertainty is created by a supply which has been inflating in proportion to uncertain trading volume. Calculating the token value is therefore challenging for traders who earn them or for users who buy and sell them. Market makers want to know in advance of trading the transaction cost and be able to factor this into their trading strategy. The variable 'rebate' which Nectar tokens represented (credited only once per month) inhibited these strategies in many cases. The clear takeaway is that simplicity is essential, and that the Nectar 1.0 model was overly complex.

Proposal

The switch to Nectar 2.0 will represent a switch from inflation to deflation, whilst at the same time destroying 80% of undistributed tokens, and will involve conducting a 'staking' event to result in a further supply reduction.

Token holders will stake their Nectar tokens (lock them into a smart-contract on the Ethereum blockchain) to opt into the changes.

[7] *As of 19th of September 2019*

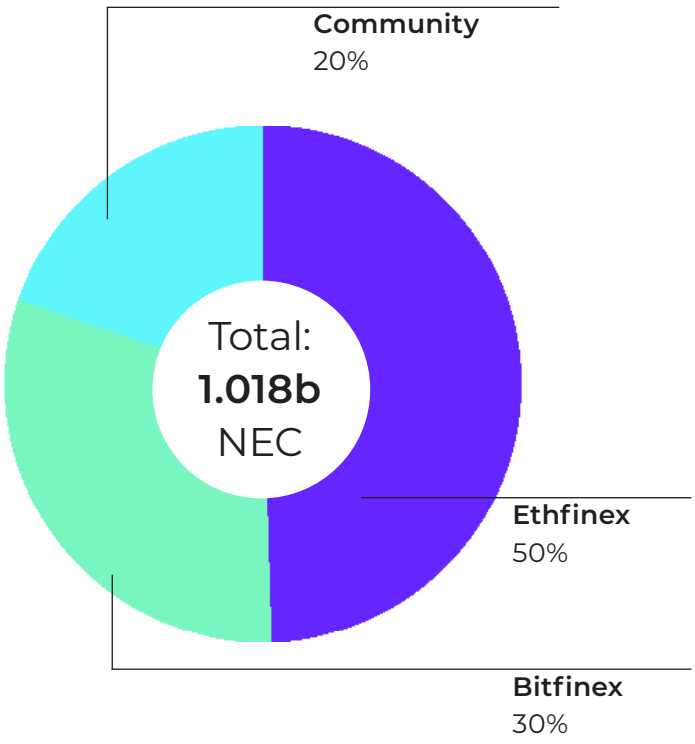
An indirect consequence of this 'staking' event will be to make the full distribution of Nectar tokens transparent on-chain. Today, more than 90% of tokens appear to be held in the top 5 on-chain addresses, but these addresses actually represents all of the tokens which are held in hot and cold storage on behalf of Ethfinex exchange customers. More details about the implications of this are provided under the DAO Launch section.

Customers of Ethfinex Centralised exchange will be able to continue trading via DeversiFi by transferring their funds to a wallet which only they control, or alternatively will be able to continue using their account with centralised custody via Bitfinex.

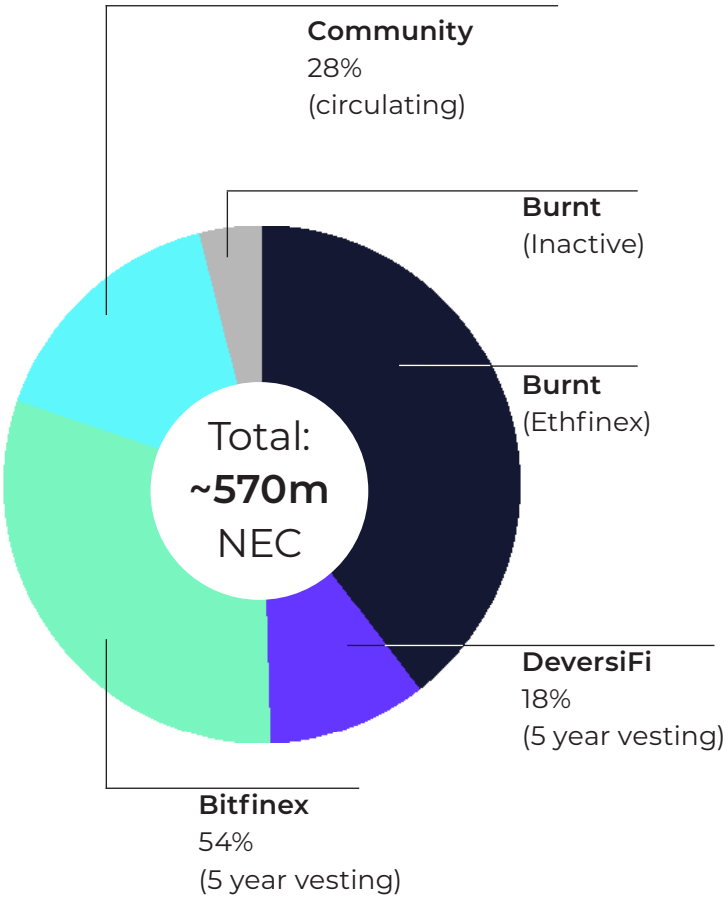
Once this migration has been completed, Ethfinex Centralised will slowly be closed down. Issuance of Nectar tokens will cease and the supply will then become fixed or deflationary.

To mark this milestone, Ethfinex will reduce the supply by destroying 80% of its remaining undistributed tokens (which represents 400 million tokens). As a result, Ethfinex will no longer have a voting majority of tokens going into the community governance phase. Tokens held in inactive or lost accounts, or earned but never claimed through verification on Ethfinex, will never be transitioned to Nectar 2.0 and as a consequence the supply will be further reduced[10].

NEC 1.0 Distribution



NEC 2.0 Distribution - after burning event



[10] *https://blog.chainalysis.com/reports/money-supply*

2

Whitelist Removal and Ecosystem Growth

A whitelist was active at launch, which required users who earned Nectar tokens and transferred them on the Ethereum blockchain to have agreed a set of terms and to have registered their identity with Ethfinex. This was seen as a short-term solution and necessary precaution at the start of Nectar's journey.

New Changes:

One of the changes proposed for Nectar 2.0 is the complete removal of the whitelist, which will allow the tokens to be transferred freely among all Ethereum addresses. At the same time, this will allow the tokens to interact with the permissionless decentralised finance ecosystem being built on Ethereum.

Nectar will be traded more widely on both centralised and decentralised exchanges because trading will no longer be restricted by the need for identity verification to Ethfinex.

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3

DeversiFi: Fee Discounts

The value of Nectar will now be tied to the success of decentralised exchanges, starting with DeversiFi[11] (previously known as Ethfinex Trustless).

As a consequence, holding Nectar entitles traders to fee discounts based on a linear schedule. The discounts are based on the average balance in the user's address over the past 30 days, which incentivises holding and reduces circulating supply. Tokens locked in the necDAO will also count towards discounts.

The fee discount is applied on a rolling basis based on the user's reference amount of NEC (the average balance in the user's address over the past 30 days). If Alice holds 1 NEC she will be eligible for a 20% fee discount on her first 100 USD equivalent of 30-day trading volume every period. If she holds 100,000 NEC she will be eligible for a 20% discount on her first 10 million USD equivalent of 30-day trading volume.

This discount structure provides a clear and easily calculable value for Nectar, in terms of the discounts that buying and holding Nectar gives to a particular trader using DeversiFi. For example, if a trader expects to do 10 million USD of trading volume every 30 days, buying and holding 100,000 NEC can give them a saving of 4000 USD per 30 days.

Fee discounts are also available to incentivise placing larger orders and reaching higher 30-day trading volume thresholds. Each of these three discounts are applied commutitavely to keep the calculation simple. e.g. Max discount = 100 x (1 - (1-0.3) x (1-0.2) x (1-0.2)) %

Volume $	Volume Discount	Order Size	Order Size Discount	NEC Held	20% Discount on 30-day trading volume up to
0	0%	$0.00	0.00%	0	$0
$150,000	5%	$500.00	15.00%	100	$10,000
$1,000,000	10%	$2,000.00	20.00%	1,000	$100,000
$4,000,000	15%			10,000	$1,000,000
$9,000,000	20%			100,000	$10,000,000
$18,000,000	25%			1,000,000	$100,000,000
$30,000,000	30%			∞	$ ∞

[11] *https://deversifi.com*

4

DeversiFi: Buy & Burn Model

The NEC supply will be reduced over time by applying a buy & burn model. Once a week, NEC tokens will be purchased, using up to 50% of the revenues from DeversiFi trading fees, via an open and transparent auction mechanism. The purchased NEC tokens will then be burnt.

The percentage of revenues used will increase as the daily trading volume increases, amplifying the effect of these buy-backs. The buy-backs will be operated using a smart-contract auction similar to that developed and deployed by the Melon Protocol[12].

Advantages of buy-back on the price of NEC:

- Creates a direct link between NEC price and trading volumes on DeversiFi; and
- Daily auctions provide continuous buy-side pressure for NEC markets.

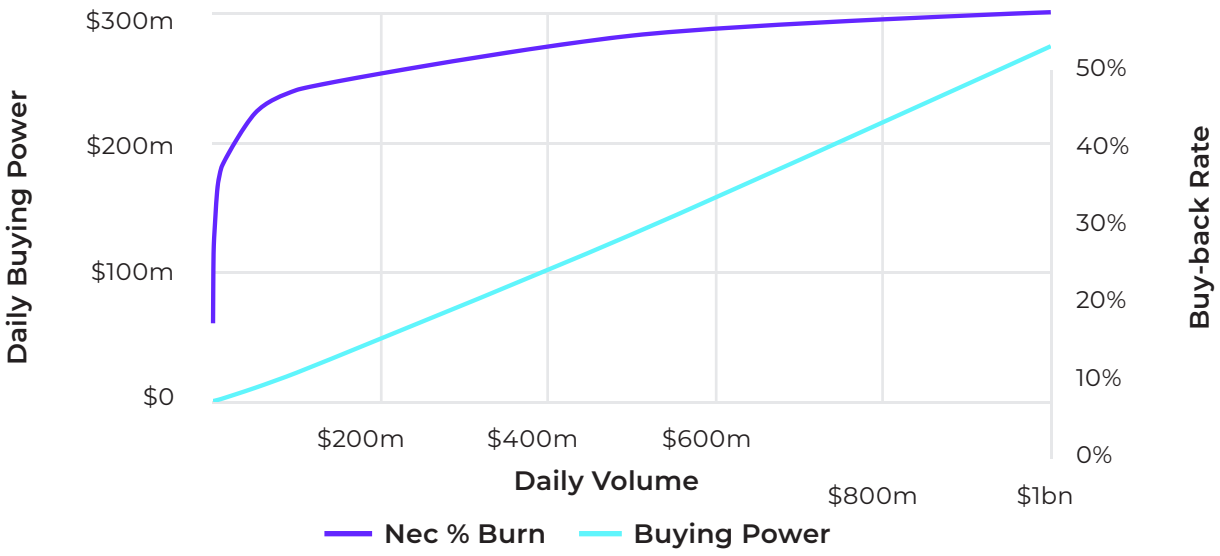
Advantages of auction system (as opposed to direct market purchases):

- The buying of NEC happens on a known schedule using auctions, and these cannot be front-run;
- Participation is open to anyone and transparent;
- Price discovery of auctions is fair, even during periods of low volumes, and the price can be arbitraged to the market;
- No legal risk of price manipulation from an entity buying NEC manually on the market;
- Auctions can occur using multiple fee currencies, removing the need to first convert all collected fee revenues into one currency.

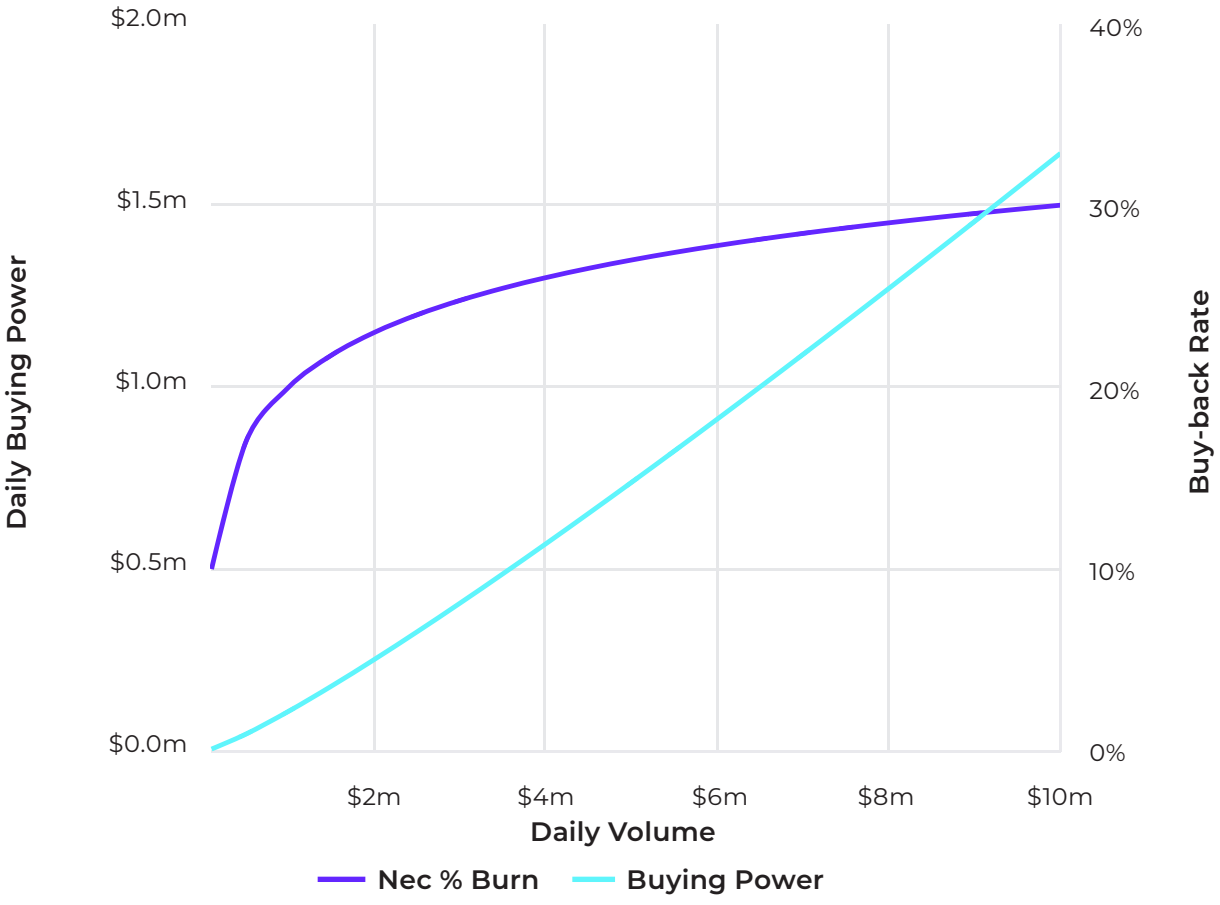
24-hour trading volume	Percentage of revenue used
0 - 0.1m USD	0%
0.1 - 1m USD	10%
1 - 10m USD	20%
10 -100m USD	30%
100m - 1b USD	40%
>1b USD	50%

[12] *http://monitoring.melon.network/*

Revenues dedicated to NEC buy & burn *(full schedule)*



Revenues dedicated to NEC buy & burn *(daily volumes up to $10m snapshot)*



5

necDAO: Decentralised Autonomous Organisation

A substantial decentralised organisation will be launched on behalf of the 2000+ Nectar token holders, with the purpose of growing and governing the world's largest decentralised exchange network, as well as promoting Nectar token utility. It will launch as one of the most highly funded DAOs, owning over 17,000 ETH (if every Nectar token holder opts in), with rights to govern aspects of DeversiFi as its initial remit.

Governance technologies are a rapidly evolving stack in the blockchain space. For over 12 months Ethfinex has been contributing to this area of research, through significant experiments using a novel token listing process, Kleros[13], for decentralised evaluations of tokens, a 3-day Governance Summit[14] and the use of DAOstack[15] for allocation of funds for community bounties.

To leverage the compounding effects of permissionless innovation in this field, we intend to build upon and contribute back to the leading technologies for community governance. New models based on prediction markets for decision making, via DAOstack, are now mature enough to be used and make it possible to coordinate thousand person organisations.

Reputation (voting power) in the necDAO will be distributed via two major mechanisms to Nectar token holders, with a final small part of the reputation reserved to be sold (see reputation scheme section for more information).

At launch, the necDAO will be one of the largest DAOs in the industry, with a substantial amount of funding and many participants in the DAO. The necDAO will also be run by NEC holders who are likely to be traders first and foremost with immeasurable experience and knowledge. NEC holders will be able to make proposals, deploy capital and grow the DAO as they see fit. The necDAO will exist independently of DeversiFi, but given the utility that DeversiFi gives NEC, there should be a close and synergistic relationship. For instance, NEC holders may wish to propose and fund new features for DeversiFi, agree marketing & events budgets, or propose additional incentives for traders who contribute to DeversiFi. The necDAO places the NEC community in direct control of a substantial amount of ETH and also puts them at the heart of DeversiFi.

[13] *https://blog.kleros.io/kleros-ethfinex-tcr-an-explainer/*
[14] *https://summit.ethfinex.com*
[15] *https://blog.ethfinex.com/ethfinex-launches-funding-dao/*

5

necDAO: Decentralised Autonomous Organisation *continued*

Scope, Assets and Funding

necDAO will have scope to govern:

- A whitelisted tokens registry (dictating the assets which can be traded on DeversiFi)
- The Ethereum Name Service records registered for the DeversiFi smart-contracts
- Ownership of the Nectar ERC20 Token controller smart-contract for future upgrades
- The management of the earned exchange fee pot (around 17k ETH)

The necDAO will manage:

- the "fee pot" (50% of trading fees collected so far during the Nectar distribution phase on Ethfinex, around 17k ETH).

When a nectar holder claims their reputation in the new DAO, they are asking for their proportional share of the “fee pot” to be transferred to the DAO.

The "fee pot" will begin slowly dripping funds to the DAO via a vesting contract over a 3 year vesting. This allows vesting to be cancelled if vulnerabilities are later found, rather than having the full funds at risk in a complex smart-contract.

Future funding may come from other sources which the DAO develops or negotiates.

DAO Launch Process

In order to provide adequate time for NEC holders to orientate themselves with the intricacies of the necDAO and its processes, the launch will be split into several sections:

1 **Education and bug bounty** 6 weeks

20th September 2019

Begin the education of Nectar token holders about DAO vision and functionality. Provide tools and training about the launch process. The bug bounty runs for 1 month to incentivise the discovery of vulnerabilities, alongside multiple security audits.

2 **Reputation bootstrap** 4 weeks

7th November 2019

During the reputation bootstrap phase, no governance functions are available, but the DAO is deployed and Nectar token holders can begin to earn their Reputation. This ensures that there will be a wide distribution of Reputation by the time the first proposals are presented.

3 **Redeeming phase** 2 weeks

7th December 2019

During this phase, Nectar token holders can claim their Reputation and become familiar with the tools for making and voting on proposals. Proposals can be made to the DAO but may not be voted on or accepted.

4 **Governance phase** indefinitely

14th December 2019

The perpetual governance phase begins. The vesting of the DAO's funds, held as Ethereum, begins to become available allowing proposals to request them.

The total Reputation available is 1 million (Reputation is not transferable). There will be three ways of obtaining Reputation. Two of these will exist only during the initial bootstrap phase, and the third will be perpetual.

A. Nectar Staking scheme
Perpetual – 850k Reputation available

Each month there is a new staking period, where users may lock Nectar tokens.

When staking, a user will indicate the number of periods (N) he is willing to lock his tokens (maximum of 12 periods). Staking tokens involves transfering them to a smart-contract.

Every month there is a Reputation auction. For a period (*n*), there is an amount of Reputation (Rn) available, which is defined by:

$$R_n = R_0 a^n$$

where $a=0.9$ *and* $R_0=85$ *Rep.*

The Reputation available in each period is divided pro rata w.r.t a score. The score for each user is:

$$S = NT$$

where N = remaining periods and T = NEC tokens.

To avoid programmatic math issues, the number of periods will not continue to infinity, rather, it will be capped at 100 (~8.3 years), at which point the new available Reputation will have already become negligible.

The time that staked tokens are locked for can be increased at any point by the user. For example, if a user is already locked for 3 more months, they may lock from now up to 12 more months, and update their score accordingly.

B. Nectar Snapshot scheme
(Initial – 100k Reputation available if all claimed)

The scheme will have a predefined block number (*b*), which will represent the snapshot of token holders. There will be a total Nectar tokens (T_b) at the snapshot. The current Nectar token smart-contract allows balances at a historic block-number to be queried.

During the bootstrap period (4 weeks), an agent that held *tb* Necar tokens during the snapshot can claim Reputation. The Reputation received is:

$$R = \frac{tb}{Tb}\ 100k\ rep$$

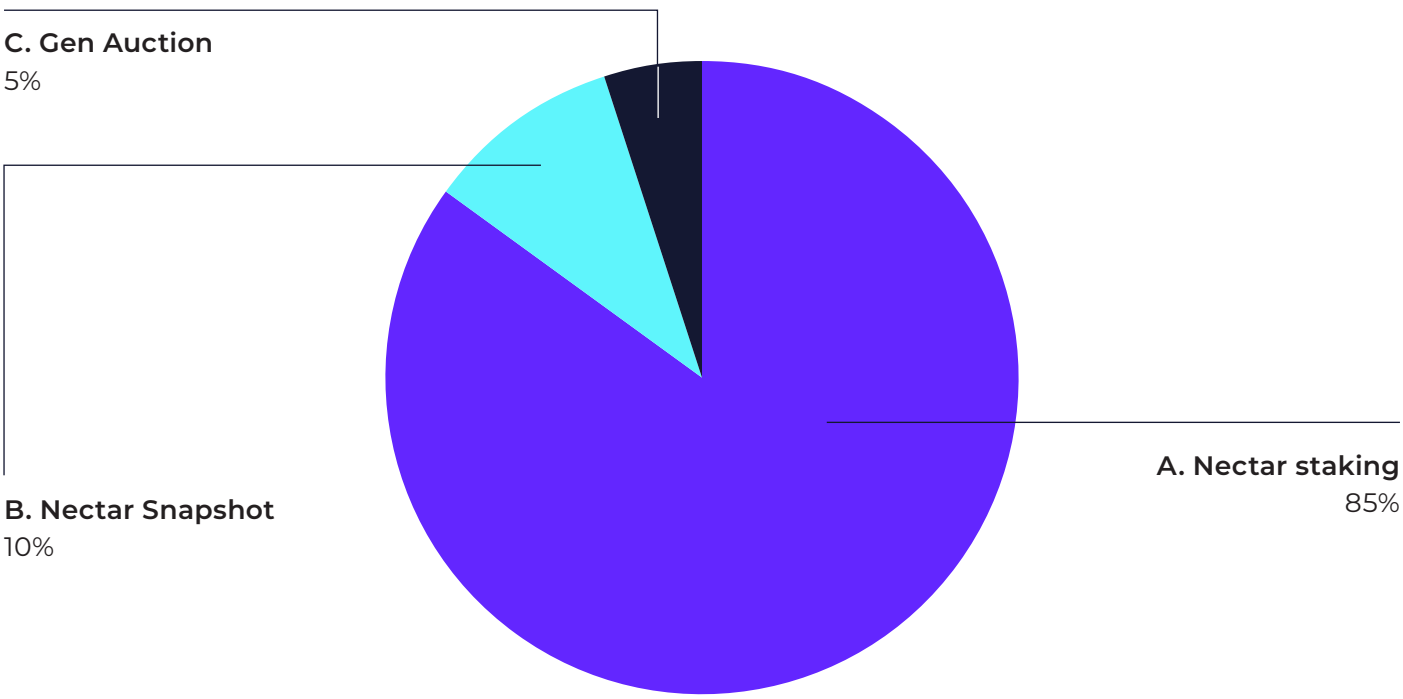
Reputation will only be redeemable at the end of the bootstrap period. Reputation not claimed will be lost. Note that exchanges must claim reputation on behalf of customers in order to unfreeze NEC, although it is not transferable. It is therefore recommended that all holders withdraw from exchanges in advance.

C. GEN token Auction
(Initial – 50k Reputation available)

There will be 10 auctions lasting 3 days each.

Reputation in the auctions is bought using DAOstack GEN tokens. The acquired GEN is then owned by the DAO and used to reward those who make proposals.

Reputation distribution schemes



Note: All Nectar tokens will be frozen at the start of the transition to NEC 2.0. Once a token holder participates in the DAO, by staking or claiming during the redeeming phase, their tokens become transferrable. Nectar token holders opting not to participate will be able to destroy their NEC to claim the proportional share of Ethereum held on their behalf. After 12 months, tokens which have not been unfrozen or destroyed will be considered inactive and cease to exist. Exchanges should be aware of this in order to un-freeze customer funds.

Governance schemes

There will be 3 schemes available during governance. Each scheme will have different parameters, depending on what the aims of the corresponding proposal. For example, a proposal to transfer funds outside the DAO requires a higher level of agreement and requires a longer challenge period before passing compared to a proposal which simply signals agreement.

Legal Disclaimer

It is not expected that Ethfinex Inc. or any other legal entity will provide any new utilities or roadmap for Nectar after launching 2.0.

Once the DAO has launched, it is responsible for the future roadmap and development of NEC and owns all of the infrastructure created, proposed and launched on its behalf.

All future decisions and new utilities proposed for Nectar must be decided and implemented by its DAO. Whilst the DAO may make decisions regarding Nectar it cannot bind third parties. So, for example, were the DAO to propose to use 100% of DeversiFi's revenues to buy back NEC this could not be done as it would not be a decision within the DAO's competence. However the DAO may propose an offer to DiversiFi or another third party to buy, for example, an additional 10% of future revenues for the DAO. The third party would be at liberty to reject this offer as with any commercial transaction.

DeversiFi

A new company will continue to operate, build, develop, and improve DeversiFi (previously Ethfinex Trustless) and may add new features to it.

A new company will continue to operate, build, develop, and improve DeversiFi (previously Ethfinex Trustless). It will have no obligations to Nectar holders or the necDAO beyond providing the stated fee discounts and using a specified part of revenues to buy and burn Nectar as outlined above. However, it may choose to make new features that might benefit the necDAO.

Over the next 24 months of operations, the new company will focus on achieving the following goals and milestones:

- Reaching 10 million USD trading volume per day.
- Scaling to achieve average throughput of > 1 transaction per second using Zero Knowledge proofs for batch settlement.
- Adding margin and funding capabilities via integrations with other DeFi systems, such as trading of leveraged tokens.
- Growing its cross-chain offering to allow the trading of tokens and currencies which are not native to the Ethereum blockchain.

Conclusion

This paper has detailed the evolution of the Nectar (NEC) token since its inception in February 2018, the impetus for change and the move to the new NEC 2.0 model.

DeversiFi will be adding new utility to NEC, for instance in the form of large fee discounts and pledging an escalating share of exchange trading revenues to buy & burn circulating NEC tokens. NEC 2.0 will move to a deflationary model, instead of the previous inflationary model, and DeversiFi will also burn 80% of its own NEC tokens ($24m USD at current prices) in order to reduce the total supply. The 17807 ETH which was pledged to NEC holders from Ethfinex exchange fees will be deployed into a new necDAO, controlled exclusively by the 2000+ strong NEC token holder community, in one of the world's largest DAOs.

The above detailed changes have been carefully put together in consultation with NEC holders and represent a comprehensive overhaul of the NEC token economics. These changes mark the start of an exciting new chapter for NEC, NEC token holders and DeversiFI.